



Pagami Creek Wildfire

December 2011

A lightning strike approximately 13 miles east of Ely started the Pagami Creek Wildfire, inside the Boundary Waters Canoe Area Wilderness (BWCAW). The fire smoldered in a bog for several days. Like hundreds of other lightning fires, it produced barely enough smoke to indicate its existence. Then a series of extraordinary and unusual conditions came together that caused the Pagami Creek Fire to demonstrate unprecedented behavior and grow to historic proportions.

The Pagami Creek Wildfire was first detected on August 18, 2011. Fire managers monitored the fire and assessed potential risks while it continued to smolder at less than ¼ acre within a bog. On August 26 relative humidity dove to 18% and a strong north wind pushed flames up into the tree tops and the fire spread 1.5 miles south, growing to approximately 130 acres. The precipitous drop in relative humidity was unexpected and very unusual. Temperature and precipitation forecasts for the entire state of Minnesota had indicated normal levels for August through September with relative humidity above the mid 30's and at least 2 inches of rain. Fire managers initiated active suppression efforts that would continue to be challenged by unprecedented conditions and the driest fall in 140 years.

On September 6, fire managers completed a burn out operation between the fire and the popular Lakes One and Two area to reduce risk of the fire moving out of the BWCAW and threatening the homes, cabins, and businesses along the Fernberg corridor to the north. Northerly winds on September 9 moved a narrow finger of fire around the southwest edge of the burn out and the fire expanded to 4,500 acres.

On Monday, September 12, extreme shifting winds caused the fire to begin a sequence of unprecedented crown fire runs. Four two-person public safety crews were in the Insula Lake area moving recreationists out of an area fire managers thought might be threatened within the next few days. A rapid, late morning run east by the fire of more than eight miles overtook six of the wilderness rangers. They followed firefighter protocol and deployed the fire shelters that all wildland firefighters are required to carry. Due to their training and quick actions, none of the wilderness rangers were injured. A wind shift in early afternoon caused the fire to expand another six miles east. This was followed by another wind shift to the northwest, causing the fire to spread more than ten miles southeast and outside of the southern Wilderness boundary threatening the Wanless area northeast of the town of Isabella. The Lake County Sheriff's Office ordered a mandatory evacuation of 36 addresses along the Windy Lake Road (County Road 7). By September 13, the fire was approximately 93,000 acres.



Pagami Creek Fire, August 26

After September 13, fire crews successfully prevented any significant expansion of the fire. Despite difficult access and challenging terrain, containment lines were constructed around most of the fire. Hot spots threatening containment were put out. Campfire restrictions were lifted across the Forest on October 14. As of mid-November the area within the fire perimeter was still at approximately 93,000 acres and more than 90% of the fire was surrounded with a continuous

fire break. The area inside the fire perimeter within the BWCAW remains closed to all public use for safety reasons.

After the fire

The work of managing a wild fire continues after the flames subside. As soon as fire activity decreased, an interdisciplinary group of resource specialists surveyed the area affected by the fire and prepared a Burn Area Emergency Response (BAER) report which includes recommended actions to protect resource values, including water quality, recreational opportunities, and wildlife habitat. Recommendations cover actions such as the rehabilitation of recreation sites, erosion control, and more. Superior National Forest managers have already begun and will continue implementing recommended actions.

Of the more than 2,100 camp sites in the BWCAW, only 114 were affected by the fire. Of these, roughly 63 received light to moderate fire effects and will be reopened spring 2012 after minor restoration is done. Campsites and trails with more severe fire effects will need additional site work before reopening, and a limited few may need to rest to allow vegetation to return.

The Forest Service and our partners update and enhance preparations for potential incidents and work collaboratively on fire prevention every year. For example, we will work with state, county, and Tribal partners to identify any adjustments needed to Community Wildfire Protection Plans. There will also be an in depth review and evaluation of the Pagami Creek Wildfire where we will share lessons learned and suggestions for improvements.

A boreal forest rejuvenating

Visitors will witness a changing, rejuvenating forest in the burned area over the coming years. The landscape that people were used to seeing before the Pagami Creek Fire was created primarily by similar fire events in the past. A guiding management objective for the Wilderness is to allow natural processes, including wildfire, to play their ecological role to the greatest extent possible while minimizing potential risks to human life and private property. Natural processes will re-establish this fire-dependent landscape through the succession of ground plants like fireweed to shrubs such as raspberry and blueberry, to tree cover including paper birch and pin cherry, jack pine, aspen, and red pine. There will be an increase in animals such as the black-backed woodpecker that are rarely seen outside of burned areas.



Changed conditions for Wilderness visitors

Much of the currently closed area will be reopened to visitors in 2012 with some cautions. Visitors will need to be aware of “snags”. These standing trees may look solid but the root system may have burned away and they could fall over at any time. Bear vaults will be recommended in portions of the fire area since there may not be sufficient trees to hang food bags. Campers will want to bring a cook stove and not depend on limited wood supplies. Charred wood on the ground will best be left so it can provide valuable nutrients as it decomposes and help reduce erosion by blocking water movement down slope. Visitors can help vegetation to recover more quickly by using tent pads and staying on trails.